
Product Datasheet

HiDi® DNA polymerase
#9001

Product Name	HiDi® DNA polymerase
Catalog Number	#9001
Description	HiDi® stands for High Discrimination of mismatches at the 3'-terminus of primers in PCR. This enzyme family is optimized for this feature and is the first choice for applications that rely on this property such as allele-specific PCR (asPCR), also known as allele-specific amplification (ASA). Comparison studies with competitor products show that the HiDi® DNA polymerase family is the first choice for highly selective PCRs, such as genotyping by allele-specific PCR, HLA genotyping, analysis of single CpG methylation sites or the detection of mutations in a high background of wild-type sequences. By using HiDi® DNA polymerase, less than 10 copies of a mutation can be detected in a background of >10,000 wild-type copies without any other tedious assay optimization. Applications: - Allele-specific PCR (asPCR), allele-specific amplification (ASA) - HLA genotyping - Analysis of single CpG methylation sites by PCR (methylation specific PCR, MSP) - Mutation detection by PCR even in a high background of wild-type sequences - Genotyping e.g., in CRISPR/Cas and TALEN approaches This polymerase is also available as a full-length Taq DNA polymerase with a nuclease domain, featuring 100% compatibility with hydrolysis probes (TaqMan® probes etc.). Several independently conducted studies show that HiDi® DNA polymerase is ideally suited for use in asPCR in numerous research areas ranging from mutation detection to genome editing. Please see "References" below. <i>For research use and further manufacturing. Designed and manufactured under ISO13485</i>
Tested Applications	End-Point, Real-Time
Brand	myPOLS Biotec
Storage	-20°C

- References**
- Lifestyle-specific S-nitrosylation of protein cysteine thiols regulates *Escherichia coli* biofilm formation and resistance to oxidative stress.**
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- Primordial Germ Cell Migration and Histological and Molecular Characterization of Gonadal Differentiation in Pachón Cavefish *Astyanax mexicanus***
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Link to publication: <https://doi.org/10.1159/000513378>
- Emergence of artemisinin-resistant *Plasmodium falciparum* with kelch13 C580Y mutations on the island of New Guinea.**
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Link to publication: <https://doi.org/10.1371/journal.pone.0229712>
- Eliminating primer dimers and improving SNP detection using self-avoiding molecular recognition systems.**
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Link to publication: <https://doi.org/10.1093/biomethods/bpaa004>
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Matsunari H, Watanabe M, Hasegawa K, Uchikura A, Nakano K, Umeyama K, Masaki H, Hamanaka S, Yamaguchi T, Nagaya M, Nishinakamura R, Nakauchi H, Nagashima H.
Stem Cell Reports. 2020 Jan 14;14(1):21-33
Link to publication: <https://doi.org/10.1016/j.stemcr.2019.11.008>
- A New Protocol for the Detection of Sterigmatocystin-producing *Aspergillus* Section *Versicolores* Using a High Discrimination Polymerase.**
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Kikuchi Y, Hara-Kudo Y, Terajima J, Sugita-Konishi Y.
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 Genome Res. 2018 Feb;28(2):223-230
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diatom *Phaeodactylum tricornutum* by DNA-free genome editing.

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Content	S pack: 250 U, 5 U/μl, 1 x 50 μl HiDi® DNA polymerase; 1 x 1.25 ml 10x HiDi reaction buffer M pack: 250 U, 5 U/μl, 1 x 200 μl HiDi® DNA polymerase; 2 x 1.25 ml 10x HiDi reaction buffer
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